

*Note on Comet Gale (b 1894).* By Walter F. Gale.

The following elements have been computed by the Rev. Thomas Roseby, LL.D., of this city, from Mr. Tebbutt's observations of April 3, 6, and 12:

T	1894 April 13.757 G.M.T.
$\pi$	1° 32' 31.6"
$\delta$	206 14 23.8')
$i$	87 16 15.3
$\log q$	9.99349
	Motion direct.

The deduced middle place closely agrees with observation, the differences being

$$\begin{aligned} C-O & d\lambda \cos \beta - 0''88 \\ d\beta & + 7.3 \end{aligned}$$

The comet became visible to the naked eye on April 7, and on the 25th reached the 4th magnitude. At no time, however, was the tail exhibited to unassisted vision.

It may be worthy of record that on April 2 the tail was 1° long, very faint, and narrow. It increased in brightness until, on the 12th, it was approximately 2° long and 1' wide, the diameter of the coma being 12'. On the 15th, when next observed, the tail had entirely disappeared—a change certainly not due to parallax. The comet remained a circular nebulosity, with considerable condensation, until the 20th, when a diffused extension was visible, which subsequently appeared as an ill-defined tail 40' in length.

*Paddington, Sydney, N.S.W.:*  
1894 May 1.

*Observations of Gale's Comet, made at the Cambridge Observatory, with Northumberland Equatorial and Square Bar Micrometer.*

June 1894. *Cambridge Observations of Gale's Comet.*

(Communicated by Sir R. S. Ball.)

G.M.T. corrected for Aberrn.	Geo. R.A.	Geo. Decl.	Compared Stars. R.A. 1894 o. h m s	Decl. 1894 o. ° ' "	Authority.	No. of Comparisons.
1894. May 4'39656	8 28 36 <sup>8</sup>	- 3 ° 6' 47.5	8 31 13.29	- 3 ° 6' 32.3	Lalande 16947	5
7'38336	8 57 48.70	+ 7 26 4.0	8 57 36.89	+ 7 13 59.5	Bessel 8 <sup>h</sup> 1423	6
7'39526	8 57 55.22	7 27 49.5	8 57 36.89	7 13 59.5	" "	6
7'45629	8 58 27.91	7 40 53.4	8 57 6.31	7 42 56.4	Bessel 8 <sup>h</sup> 1414	5
10'39812	9 22 36.30	15 52 40.7	9 23 32.57	15 50 5.4	" 9 <sup>h</sup> 45.0	9
10'39812	9 22 36.84	15 52 40.3	9 24 46.51	15 43 36.2	" 9 <sup>h</sup> 47.2	
17'40137	10 6 17.19	28 20 50.8	10 5 34.02	28 21 56.0	Camb. Zones, 3 obs.	10
18'41513	10 11 23.63	29 33 42.4	10 14 39.06	29 28 30.9	" "	10
21'42544	10 25 11.19	32 34 56.5	10 23 22.61	32 32 52.7	Bessel 10 <sup>h</sup> 417, 418	
21'42544	10 25 9.26	32 34 57.2	10 26 28.46	32 30 7.1	" 10 <sup>h</sup> 48.0	10
23'43412	10 33 22.53	34 12 15.4	10 40 52.20	34 7 1.7	" 10 <sup>h</sup> 78.9	
23'43412	10 33 22.67	34 12 15.8	10 41 47.46	34 8 56.7	" 10 <sup>h</sup> 80.5	5
24'43281	10 37 13.74	34 54 41.6	10 35 58.84	34 50 10.7	" 10 <sup>h</sup> 682, 683	10
31'43935	11 0 34.68	38 35 0.5	11 2 29.81	38 33 48.4	10 <sup>h</sup> 1216, 1217	
31'43935	11 0 34.90	38 34 57.8	11 4 55.03	38 30 25.6	" 11 <sup>h</sup> 26	10

*Note 28.*

May 7.—The comparisons with Bessel 8<sup>h</sup> 1423 were unsatisfactory. The comet crossed too low in the field when the star was suitably placed.

May 21.—The results seem to indicate proper motion in one of the compared stars, or an error in Bessel's Catalogue of 2<sup>h</sup> Right Ascension.